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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/530,334 | 06/10/2000 | STEFAN ROVER | 18645-00023 | 6673 |

7590 12/23/2003
ARMSTRONG TEASDALE LLP
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One Metropolitan Square
Suite 2600
St. Louis, MO 63102

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| EXAMINER |
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NGUYEN, MINH DIEU T

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| ART UNIT | PAPER NUMBER |
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2137

DATE MAILED: 12/23/2003

JP

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/530,334

Applicant(s)

ROVER ET AL.

Examiner

Minh Dieu Nguyen

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 13-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7, 8, 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claims 1-12 are cancelled, the new amended claims 13-21 are presented for examination.

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
2. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 13, 15, 16 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Luo, US Patent 5,909,491.

a) As to claim 13 and 21, Luo discloses a method for sending a secure message in a telecommunications system using public encryption keys. After a GSM mobile user identifies himself by sending his international mobile system identity (col. 2, lines 18-21) which reads on the step of transmitting the message to be signed to a receiver, a random number (RAND) is generated and transmits to the mobile (col. 2, lines 21-24) which reads on the step of transmitting the message to be signed from the receiver to a mobile radio telephone, the RAND number is combined with the mobile user's Ki, unique mobile user ID to generate a response (SRES) (col. 2, lines 21-24) which reads on the step of signing the message to be signed via the mobile radio telephone, the SRES is returned to the network for comparison with the SRES that was calculated internally (col. 2, lines 26-28) which corresponds to the step of transmitting the signed message to the receiver, if the two SRES match, the mobile user is considered to be authentic (col. 2, lines 26-28) which corresponds to the step of communicating the signed message to an addressee.

b) As to claim 15, Luo discloses the message to be signed is transmitted between the receiver and the mobile radio telephone by means of a short-message services (SMS) (col. 1, lines 61-64; col. 5, lines 10-15).

c) As to claim 16, Luo discloses the message to be signed is displayed by means of a display provided in the mobile radio telephone (Figure 1, element 108 and 110).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luo, US Patent 5,909,491 in view of Brown, IEEE Personal Communications, August 1995.

a) As to claim 14, Luo teaches a method for sending a secure message in a telecommunications system, however he does not teach a public key process is used for signing.

Brown discloses public key is used in personal communications system (PCS) application. The handset performs a per-registration digital signature on access specific information. The handset generates a private key for use in its digital signature calculations and sends its public key to the network for digital signature validation (page 9, left column; page 10, left column, 5th and 6th paragraph)

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of a public key process in signing a message as Brown teaches, in the system of Luo so as the private key is not distributed beyond its source, so network "hackers" will not be able to infiltrate a database of handset secret number at the network.

7. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luo, US Patent 5,909,491 in view of Brown as applied to claim 13 and 14 above, and further in view of Kawan, US Patent 5,796,832.

a) As to claim 17, Brown fails to disclose that the secret key required for signing is inputted via keyboard on the mobile radio telephone.

Kawan discloses the mobile user is required to input a PIN with the numeric keypad (col. 5, lines 6-7).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the personal identification number as Kawan teaches, in the system of Luo and Brown so as to add more additional security to the network.

b) As to claim 18, Luo and Brown discloses the secret key required for signing is stored on a chipcard of the mobile radio telephone, however they fail to disclose the secret key being activated by a PIN adapted to be inputted via a keyboard on the mobile radio telephone.

Kawan discloses the secret key is stored on a smart card which is inserted into the mobile radio telephone (col. 4, lines 19-32), the secret key is activated by a PIN adapted to be inputted via a keyboard on the mobile radio telephone (col. 5, lines 1-9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of secret key stored on a smart card and activated by a PIN, as Kawan teaches, in the system of Luo and Brown so as to provide more additional security to the network.

c) As to claim 19 and 20, Luo teaches the chipcard performs the signing step as the RAND number is combined with the mobile user's Ki, a unique mobile user ID to generate a response (SRES) (col. 2, lines 21-24).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

a) Portable automated teller machine, Hitchcock, US Patent 5,050,207.

b) Method and Apparatus for Witnessed Authentication of Electronic Documents, US Patent 5,872,848.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 703-305-9727. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 703-305-1830.

The fax phone numbers for the organization where this application or proceeding is assigned are:

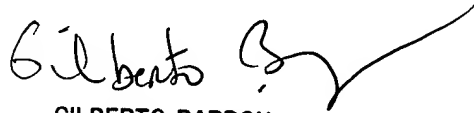
| | |
|--------------|---------------------------------------|
| 703-746-7238 | for After-Final communications |
| 703-872-9306 | for Official communications |
| 703-746-5661 | for Non-Official/Draft communications |

Art Unit: 2132

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Minh Dieu Nguyen ^{mdn}
Examiner
Art Unit 2132

mdn
12/12/03


GILBERTO BARRON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100